

COURIER
Evansville, Indiana
September 20, 1962

Team Tests Atlanta's Air To Study Cancer Potential

NEW YORK, Sept. 20—Atlanta is one of eight U.S. cities whose atmosphere has been studied by a scientific team led by an authority on environmental cancer.

The study was based on a theory that every community has its own atmospheric potential for causing lung cancer, and that these potentials should be minutely investigated.

Dr. W. C. Hueper, chief of the environmental section of the National Cancer Institute, and five associates, investigated only four potentials in the air of eight cities—and found them all present in quantities capable of causing cancer—in mice.

The four potentials were hydrocarbons which the exhausts of motor vehicles and industrial plants discharge into the air. Besides Atlanta, the cities studied are Birmingham, Cincinnati, Detroit, Los Angeles, New Orleans, San Francisco and Philadelphia.

IN THE INVESTIGATION, the researchers say, particles from these four chemical fractions were dissolved and injected into mice, and invariably gave rise to cancer at the site of injection.

Because mice are not people and because injection site cancers are not lung cancer, the scientists made no direct comparisons among cities.

Their evidence, however, indicated that each city had a different potential which involved much more than four chemical fractions on pure form. Also involved, the investigators say, were the effects of varying climates and amounts of sunshine on these and other ingredients of atmospheric pollution.

"THE PRESENT studies represent merely a first and preliminary step in a prolonged and comprehensive program dealing with relationships between air pollutants and health hazards, including cancers," the science team said in reporting to a technical organ of the American Medical Association.

But it was clear to them that

"every community has an atmospheric carcinogenic (cancer-causing) spectrum depending on local conditions, which include not only industrial activities and traffic conditions but also climate, solarization, and geological conditions.

* * *

THE TEAM was critical of scientific evidence which has assigned cigarette-smoking a principal role in the increasing rate of lung cancer. They conceded, however, that the evidence "justifies the conclusion that cigarette smoking has contributed to or aggravated the action of other carcinogenic respiratory pollutants by producing especially function-

al disturbances of the bronchial mucosa."

Continuing, the report says: "It would be most unwise, on the other hand, if through an exaggerated emphasis placed on the significance of cigarette smoking, the study of general and local industry-related air pollutants would be impaired or neglected.

"Available evidence rather definitely assigns to these factors an important role as human respiratory carcinogens. The obvious and proven lung cancer hazards related to these agents deserve serious attention especially since they can be controlled by proper sanitary and technological measures."

1005150580